

Issued 2011/07

KODAK T-MAT G/RA Film

KODAK T-MAT G/RA Film is a high-speed, ortho-sensitive medical x-ray film for use with green emitting intensifying screens such as KODAK LANEX Regular or KODAK LANEX Medium. It is coated on a blue, approximately 0.2 mm (7-mil) polyester support that has a base density of approximately 0.19, with improved static protection. KODAK T-MAT G/RA Film features T-grain emulsion technology that reduces the amount of screen-light crossover, resulting in improved image sharpness. It is processable in existing automated processing cycles as well as Rapid Access process cycles. It may also be processed manually.

Because of the use of the T-Grain technology, the characteristics of KODAK T-MAT G/RA are:

- very high contrast
- high sensitivity
- high sharpness
- high gloss radiographs
- invariant when used in different processing conditions

Sensitometric and Photographic

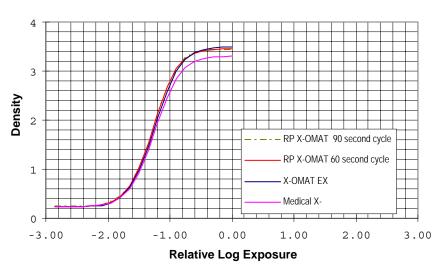
Properties:

| Screen | System Speed |
|---------------|--------------|
| Lanex Fine | 100 |
| Lanex Medium | 250 |
| Lanex Regular | 400 |
| Lanex Fast | 600 |

Sensitometric Parameters:

| Speed | Measured at 1.0 OD |
|----------|------------------------------|
| | above Gross Fog |
| Contrast | Measured as slope of the |
| | straight line portion of the |
| | sensitometric curve, and |
| | computed as the value for |
| | the rise for any three |
| | consecutive steps. |
| Gross | Density of film base plus |
| Fog | processing fog. |

KODAK T-MAT G/RA Film Simulated Green Screen 1/50 second; KODAK RP X-OMAT Chemicals KODAK X-OMAT 5000 RA Processor; Diffuse Visual Densitometry



Notice: While the data presented are typical of production coatings, they do not represent standards which must be met by Carestream Health, Inc.. Varying storage, exposure, and processing conditions will affect results. The company reserves the right to change and improve the product characteristics at any time.

Automatic Processing Recommendations:

In general, processing is recommended in KODAK X-OMAT and RP X-OMAT Processors using KODAK RP X-OMAT, KODAK X-OMAT EX II, KODAK X-OMAT LE+ Developer and KODAK RP X-OMAT LO Fixer or KODAK Medical X-Ray chemicals.

Influence of developer temperature in case of automatic processing

| -2 ℃ | Ref | +2 °C |
|-------|-------------|-------|
| 0 | Base fog | 0 |
| -10 % | Sensitivity | +7 % |
| -1 % | Contrast | +1 % |

Replenishment Rate Recommendations for Kodak Processors (Replenishment by length)

| Film Size Processed | Use Condition | Average Number of Films per 8 hours processor operation | Replenishment Rates (ml per 35x43 cm) | |
|------------------------|------------------|---|--|-------|
| | | | Developer | Fixer |
| 35 x 35 cm | High | 90 sheets or more | 50 | 70 |
| (only) | Medium | 30 – 90 sheets | 65 | 85 |
| | Low | 30 sheets or less* | 80 | 100 |
| Average size | High | 115 sheets or more | 50 | 70 |
| intermix | Medium | 40 – 115 sheets | 65 | 85 |
| | Low | 40 sheets or less* | 80 | 100 |
| 35 x 43 cm | High | 75 sheets or more | 60 | 85 |
| (only) | Medium | 25 – 75 sheets | 80 | 100 |
| | Low | 25 sheets or less* | 100 | 120 |

Please refer to Service Bulletin No. 30, available on the Carestream website, for additional processing recommendations

Recommended Starter Volumes

| Film | Environ- ment | Developer | Starter (Added to processor developer tank |
|------------------|-------------------|---------------------------------------|--|
| Mammo- graphy | Non- dedicated | RP, EX II | 89 ml (3 fl. Oz.) per 3.78 Litres (1 gallon) |
| Non- mammo | | RP, EX II, Medical X-Ray LE+ | 89 ml (3 fl. Oz.) per 3.78 Litres (1 gallon) No starter added |

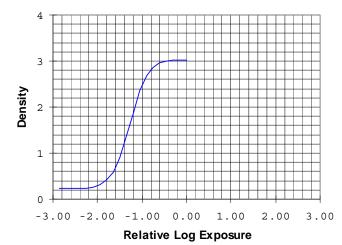
Influence of developer temperature in case of manual processing

The developing time must be adjusted as per the following the table:

| Temperature °C: | 20 | 22 | 24.5 | 26.5 |
|-----------------|----|----|------|------|
| Developer Time | 8 | 7 | 5 | 4 |
| (minutes) | | | | |

KODAK T-MAT G/RA Film

1/50 second Simulated Green Screen Exposure Seasoned KODAK GBX Developer and Replenisher, 5 minutes, 22 °C (72 °F) Manual Process; Diffuse Visual Densitometry



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Sensitometric Quality Control

(only for Germany and Switzerland)

The film id tested with a calibrated light sensitometer. The film is processed in a KODAK X-OMAT 5000 RA processor, filled with fresh Kodak RP X-OMAT Developer and KODAK RP X-OMAT LO Fixer.

Characteristics are measured according to DIN 6868-5

$$EI = 1.16$$
 $step = 9$
 $KI = 1.52$ $step = 12 - 9$

Note : the results obtained are dependent on exposure and processing conditions

Notice: The data in this publication represent product tested under the conditions of exposure and processing specified. They are representative of production coatings, and therefore do not apply to a particular box or roll of photographic material. They do not represent standards or specifications that must be met by Carestream Health, Inc. The company reserves the right to change and improve product characteristics at any time.

Storage and Handling

Storage -

| Storage - | | | |
|------------|--|---|--|
| Unexposed: | 157F | 10–24°C (50–75 °F), | |
| | | 30–50 %RH, | |
| | | Protect from heat and radioactive sources. Film is to be properly shielded from x-rays, gamma rays, or penetrating radiation. | |
| Exposed: | Keep cool, dry, and properly shielded from penetrating radiation. Process as soon as possible. | | |
| Processed: | 16–27 °C (60–80 °F), 30–50 %RH | | |

Handling -

Hands must be clean, dry and free of lotions, etc. Film should be handled carefully by the edges to avoid physical strains such as pressure, creasing, or buckling.



Do not re-use. Film is a single use medical device.

The film should be used before the expiration date indicated on the box with the lot (emulsion) number LOT.

Safelight Filter

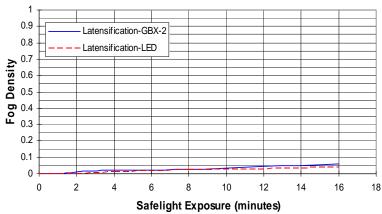


Use a KODAK GBX-2 Safelight Filter with a frosted 15-watt bulb or a KODAK LED Safelight located at least 1.22 metres (four feet)

from the film.

Latensification: Safelight exposure after primary x-ray exposure.

KODAK T-MAT G/RA Film KODAK GBX-2 Safelight Filter, 15-w att lamp / KODAK LED Safelight / 1.22 metres (48 inches) KODAK X-OMAT 5000 RA Processor; KODAK RP X-OMAT Chemicals, 35 °C (95 °F) (Fog growth with increasing safelight exposure)



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